

INFORMATION DISCLOSURE C. ATION

(Use several sheets if necessary)

Docket Number (Optional)

BU9-98-100

Application Number

Applicant(s)

W. J. Cote et al.

Filing Date

Herewith

Group Art Unit

J1046 U.S. PTO
10/05/1135
01/18/02

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
W		3,948,703	04/06/76	Kushibe, et al			
W		4,305,779	12/15/81	Steeves, et al			
W		4,395,302	07/26/83	Courduvelis, et al			
W		4,430,468	02/07/84	Schumacher,			
W		4,436,584	03/13/84	Bernacki, et al			
W		4,632,727	12/30/86	Nelson			
W		4,747,907	05/31/88	Acocella, et al			
W		4,789,648	12/06/88	Chow, et al			
W		4,944,836	07/31/90	Beyer, et al			
W		4,992,135	02/12/91	Doan			
W		5,225,034	07/06/93	Yu, et al			

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO
W	✓	EP 0 773 269 A2	11/13/96					
W	✓	EP 0 659 858 A2	12/14/94					
W	✓	EP 0 751 566 A2	06/12/96					
W	✓	EP 0 777 266 A1	11/13/96					
W	✓	EP 0 826 756 A1	08/29/97					

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

W	✓	"Selective Chemical-Mechanical Polishing Process for Removal of Copper," IBM TDB V. 36 No. 02, Feb. 1993
W	✓	"Alkaline Formulations for Chemical Mechanical Polishing of Copper Utilizing Azoel Passivation," IBM TDB V. 37, No. 10, Oct. 1994
W	✓	"Chemical Mechanical Polishing of Copper with Ammonium Persulfate," TDB V. 37 No. 10, Oct. 1994
W	✓	"Diffusion Barrier Studies for CU," Hu, et al V-MIC Conf. June 9, 1986
W	✓	"Tantalum as a diffusion barrier between copper and silicon: Failure mechanism and effect of nitrogen additions," Holloway, et al, J. Appl. Phys. 71 (11) June 1, 1992, pp 5433-44
W	✓	"Comparison of High Vacuum and Ultra-high-vacuum Tantalum Difusion Barrier Performance Against Copper Penetration," Clevenger, et al J. Appl Phys 73 (1), Jan. 1, 1993, pp 300-8
W	✓	"Initial Study on Copper CMP Slurry Chemistries," Carpio, et al, Thin Solid Films 266 (1995), pp. 238-44 (no months)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Docket Number (Optional)

BU9-98-10

Application Number

Applicant(s)

W. J. Cote, et al

Filing Date

Herewith

Group Art Unit

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		5,244,534	09/14/93	Yu, et al			
		5,281,485	01/25/94	Colgan, et al			
		5,340,370	08/23/94	Cadien, et al			
		5,354,490	10/11/94	Yu, et al			
		5,447,887	09/05/95	Filipiak, et al			
		5,486,129	01/23/96	Sandhu, et al			
		5,514,245	05/07/96	Doan, et al			
		5,516,346	05/14/96	Cadien, et al			
		5,527,423	06/18/96	Neville, et al			
		5,575,885	11/19/96	Hirabayashi, et al			
		5,612,254	03/18/97	Mu, et al			

U.S. PTO
10/05/135
01/18/02

FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO
	✓	EP 0 826 757 A1	08/29/97					
	✓	EP 0 881 673 A2	05/08/98					

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

✓	"Method of Eliminating Ta Hydride Formation During Cu Plating on Ta Films," IBM TDB V. 34 No. 7A, Dec. 1991
✓	"Chemical Mechanical Polishing of Copper with Oxide and Polymer Interlevel Dielectrics," Gutmann, et al, Thin Solid Films 270 (1995) pp 596-600 (no month)
✓	"Chemical Mechanical Polishing of Copper in Acidic Media," Luo, et al, ISMIC, Feb 22, 1996

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION <i>(Use several sheets if necessary)</i>	Docket Number (Optional) BU9-98-100	Application Number
	Applicant(s) W.J. Cote, et al	
	Filing Date Herewith	Group Art Unit

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		5,614,444	03/25/97	Farkas, et al			<div style="writing-mode: vertical-rl; transform: rotate(180deg);"> J1046 U.S. P.T. 10/05/1135 01/18/02 </div>
		5,622,525	04/22/97	Haisma, et al			
		5,676,587	10/14/97	Landres, et al			
		5,698,087	12/16/97	Bokisa, et al			
		5,746,947	05/05/98	Vanderpool, et al			
		5,770,095	06/23/98	Sasaki, et al			
		5,827,781	10/27/98	Skrovan, et al			
		5,840,629	11/24/98	Carpio			
		5,876,490	03/02/99	Ronay			

FOREIGN PATENT DOCUMENTS

REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO

OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*

EXAMINER 	DATE CONSIDERED 8/20/01
--------------	-----------------------------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.